Vamsi Cheruku

Backend developer

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PROFILE

Results-driven Software Engineer with 2+ years of experience in backend development, distributed systems, and cloud computing. Adept at designing, implementing, and optimizing scalable backend services. Strong expertise in Apache Struts, Java, MySQL, Redis, and Elasticsearch. Passionate about performance optimization, data modeling, and building mission-critical software. Experienced in test-driven development (TDD), RESTful API design, and security best practices.

PROFESSIONAL EXPERIENCE

Member of Technical Staff, *Zoho Corporation*   07/2022 – 07/2024 | Chennai, India

  Building a scalable collaboration platform for internal communication:
  - Developed and maintained scalable backend services using Java, Apache Struts, and MySQL, reducing API response times by 35%.
  - Optimized MySQL database architecture with range partitioning, improving query performance by 35% and ensuring scalability.
  - Built and optimized Redis caching systems, leveraging pipelines, transactions, and Lua scripting, improving data retrieval speed by 40%.
  - Designed Elasticsearch analyzers and token filters, improving search query performance by 25%.
  - Implemented ArangoDB for efficient management of user relationships and social interactions, enhancing data retrieval by 30%.
  - Integrated Apache Kafka for an event-driven architecture, improving asynchronous workflow efficiency by 30%.
  - Developed and maintained microservices-based architecture, ensuring modular and seamless communication.
  - Managed user authentication, authorization, and data security in a high-scale environment.
  - Developed automation scripts to fetch and aggregate social media content (Twitter, Instagram), reducing manual testing efforts by 45%.

Project Intern, *Zoho Corporation*   02/2022 – 07/2022 | Chennai, India
  - Acquired expertise in Linux administration, networking (TCP/IP, DNS, routing), and cloud computing.
  - Assisted in debugging large-scale system issues, reducing incident resolution time by 25%.

- Developed RESTful APIs and optimized backend logic, improving application throughput by 20%.

PROJECTS

Warfarin Dose Prediction
- Preprocessed large-scale clinical datasets, increasing model accuracy by 15%.
- Built personalized medicine models using KNN, Random Forest, and Neural Networks, reducing dosage prediction errors by 20%.
- Applied hyperparameter tuning and cross-validation, improving precision and recall metrics by 18%.

RateRatePro
- Built a Django-React web application for professor ratings, scaling to 2,000+ users.
- Implemented Elasticsearch-based AI search, enhancing query relevance and response times by 35%.
- Optimized deployment using Docker and AWS auto-scaling, reducing downtime by 50%.
- Set up GitHub Actions for CI/CD, accelerating deployment cycles by 40%

SKILLS

Programming Languages: Java, Python, C, C++, HTML, CSS, JavaScript.

Databases: MySQL, Redis, Elasticsearch, ArangoDB.

Tools & Frameworks: Apache Struts, Django, Apache Kafka, REST APIs, Git, CI/CD

Cloud Platforms: AWS, Google Cloud.

EDUCATION

Masters in Artificial intelligence, *Saint Louis University*   08/2024 – present | St. Louis, U.S.
Study abroad: Saint Louis University - Missouri
CGPA: 4.00/4.00

BTech in Computer Science and Engineering,   06/2018 – 06/2022
Vishnu Institute of Technology   Bhimavaram, India
CGPA: 8.12/10.00

INTERESTS

- Chess   - Cricket   - Travelling   - Coding